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Overview and Frequently Asked Questions
Oracle SuperCluster T5-8

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Oracle SuperCluster T5-8 is Oracle's fastest engineered system for running both database and enterprise applications. Combining powerful virtualization and unique Oracle Exadata and Oracle Exalogic optimizations, Oracle SuperCluster is ideal for consolidation and enterprise private cloud infrastructure deployments. Oracle SuperCluster is a complete system integrating Oracle's servers, storage, network and software - all optimized and ready to run.

Customer Benefits

Ideal for Consolidation and Private Cloud

SuperCluster T5-8 is an engineered system with integrated Oracle servers, storage, networking and software technologies optimized together to run Oracle Database, Java and enterprise applications unchanged while accelerating Database and Java performance by up to 10x improving user response times. With no single point of failure, SuperCluster T5-8 enables high availability for database and applications minimizing planned and unplanned downtime providing the highest service levels for core business applications across all tiers of the data center. SuperCluster T5-8 runs Oracle Database and enterprise applications together on one system lowering TCO through consolidation and delivering secure multi-tenant cloud services 5x faster than the traditional build-your-own IT approach.

Core system features and benefits include:

Complete Oracle engineered system: Speed time to value by up to 5x compared to build-it-yourself system architectures

Designed for database and application consolidation: Lower TCO up to 5x by running Oracle Database and enterprise applications together on a single system

Automated provisioning of database and infrastructure as a service: Accelerate database provisioning by 32x

Based on Oracle's SPARC T5 microprocessor: Upgrade your datacenter with 10x the price performance of a comparable IBM Power 7+ based solution

Zero overhead virtualization with Oracle VM Server for SPARC: Maximize your system utilization by avoiding virtualization overhead and improve consolidation ratios by up to 50%

Integrated Oracle Exadata features: Oracle Exadata Smart Scan increases your database performance by offloading processing to intelligent storage servers; Oracle Exadata Smart Flash Cache improves your response times and throughput; Hybrid Columnar Compression lowers your database response times and throughput

Exalogic Elastic Cloud Software capabilities: Accelerate your Java applications up to 10x

Complete applications-to-disk management with Oracle Enterprise Manager 12c: Proactively monitor, manage and troubleshoot your entire hardware and virtualization environment

Superfast, low latency, secure InfiniBand networking: Avoid network performance limitations

Oracle Optimized Solutions: Dramatically reduce your time, effort and risk in deploying Oracle and 3rd party applications

Oracle Solaris support: Protect and seamlessly migrate software applications running on Oracle Solaris 11, Oracle Solaris 10, Oracle Solaris 9 and Oracle Solaris 8

Fibre channel connectivity: Protect your investment in legacy SAN storage and provide gradual migration to the included Exadata environment

Oracle Platinum Services: Improve your service levels with 24/7 fault monitoring, faster response times, and patch deployment services

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Frequently Asked Questions

What is Oracle SuperCluster T5-8?

SuperCluster T5-8 is Oracle's fastest engineered system for running both database and enterprise applications. Combining powerful virtualization and unique Oracle Exadata and Oracle Exalogic optimizations, Oracle SuperCluster is ideal for consolidation and enterprise private cloud infrastructure deployments. Oracle SuperCluster is a complete system integrating Oracle's servers, storage, network and software - all optimized and ready to run.

How can Oracle SuperCluster be deployed in my existing data center?

SuperCluster T5-8 is an excellent choice for consolidation of multiple tiers as well as resizing databases and applications during different periods. SuperCluster T5-8 will be installed as a complete and integrated hardware and software engineered system in its own rack. Connectivity to other systems in an existing data center can be achieved over the supplied 10 GbE NICs included in each SuperCluster T5-8 node. SuperCluster T5-8 also allows for a gradual migration to Oracle engineered systems by supporting connectivity to an existing SAN infrastructure. Optional Fibre Channel connectivity is available to facilitate migration of data from legacy storage subsystems to the Oracle Exadata Storage Servers that are integrated with SuperCluster T5-8.

What type of applications can run on Oracle SuperCluster T5-8?

SuperCluster T5-8 is best for running all database and applications on a single engineered system. Any applications supported on Oracle Solaris 11 or Oracle Solaris 10 will run on SuperCluster T5-8. In addition, applications running on Oracle Solaris 8 and Oracle Solaris 9 can be deployed on Oracle SuperCluster using Oracle Solaris Legacy Containers on Oracle Solaris 10. Access to the Oracle Exadata Storage Servers included with Oracle SuperCluster requires a minimum of Oracle Database 11*g* Release 2 (11.2.0.3). Additional certification is not required unless an independent software vendor (ISV) routinely requires certification for all new platforms.

What versions of Oracle Solaris and virtualization technologies are supported on Oracle SuperCluster T5-8?

Using Oracle VM Server for SPARC, multiple application stacks can be deployed on both Oracle Solaris 11 and Oracle Solaris 10 and are fully supported side by side. Additionally, individual Oracle Solaris 11 and Oracle Solaris 10 instances can be virtualized with Oracle Solaris Zones for optimal utilization and application performance. Even applications running on Oracle Solaris 8 and Oracle Solaris 9 can be virtualized on Oracle Solaris Legacy Containers.

Is Oracle SuperCluster optimized for Oracle Database?

Oracle SuperCluster pre-integrates Oracle's Exadata Storage Servers. For this reason it is well suited for a wide range of high-performance database deployments ranging from scan-intensive data warehouse applications to highly concurrent online transaction processing (OLTP) applications. Because of its support for the latest version and early versions of both the latest Oracle Database and its built-in zero-overhead virtualization, Oracle SuperCluster is an ideal system for database consolidation. Additional Exadata Storage Expansion racks can be connected to Oracle SuperCluster using high-speed InfiniBand networking.

Is the new solution the right choice for all Oracle Database deployments?

SuperCluster T5-8 is well suited for all database deployments. It is an ideal system to consolidate both small and large numbers of databases, or to deploy complex, multi-user development, test and deployment environments. Oracle SuperCluster is an excellent choice for all database workloads, ranging from scan-intensive data warehouse applications to highly concurrent OLTP applications.

How do Oracle Exadata Storage Servers work with Oracle SuperCluster T5-8? What if I don't use Oracle Database 11*g* Release 2?

The full capabilities Oracle Exadata Storage Servers will be included with every SuperCluster T5-8. Oracle Exadata Storage Servers are specially optimized for Oracle Database 11g Release 2 operations and will provide outstanding performance for both transaction-based and decision support workloads. An optional external storage rack can be configured for additional performance and capacity. The minimum Oracle Database release required for Exadata and the Oracle Exadata Storage Servers is Oracle Database 11g Release 2 (specifically 11.2.0.3). Applications that are dependent on earlier releases of Oracle Database will need to

be migrated to enjoy the benefits of Oracle Exadata Storage Servers.

What are some of the other unique capabilities?

SuperCluster T5-8 incorporates high-speed on-board encryption engines for data security, low latency QDR InfiniBand and 10 GbE networking for connection to application infrastructure, integrated server, network, and storage virtualization through Oracle Solaris Zones, and the mission- critical, Oracle Solaris operating system.

What benefits are offered for running Oracle applications on Oracle SuperCluster T5-8?

SuperCluster T5-8 delivers extreme performance, no single point of failure and high efficiency while reducing overall risks and lowering costs. Designed for extreme database and application consolidation, customers can lower TCO up to 5x by running Oracle Database and enterprise applications together on SuperCluster T5-8.

We run smaller databases, will this fit my needs?

SuperCluster T5-8 currently includes Oracle's newest SPARC T5-8 servers, which are suitable for consolidating smaller Oracle databases and come with virtualization capabilities that allow customers to run smaller applications in secure Oracle Solaris Zones or virtual machines supported by Oracle VM Server for SPARC.

Are Oracle Solaris Zones supported on Oracle SuperCluster T5-8?

Yes, Oracle Solaris Zones are a great way to consolidate database and applications on Oracle SuperCluster.

What are examples of application solutions that can benefit from Oracle SuperCluster T5-8 high availability infrastructure?

SuperCluster T5-8 is best for Oracle, ISV and custom applications. Its built-in availability features address customers' uptime requirements through hardware availability, through the Oracle Solaris operating system with Predictive Self-Healing and fault management, and through the optional use of Oracle Solaris Cluster, which provides even higher levels of availability by offering built-in, automated failover of virtual environments and applications across SuperCluster T5-8 as well as disaster recovery capabilities.

What Oracle Optimized Solutions are available for Oracle SuperCluster?

Oracle Optimized Solutions dramatically reduce deployment time, effort and risk while maximizing performance using tested and documented best practices. Customers can deliver cloud services "out of the box" using Oracle Optimized Solutions. Oracle Optimized Solutions provide templates that customers can leverage to reduce operating costs on aging assets while delivering more flexible service environments to internal application users. Customers can quickly deploy enterprise cloud services with 24/7 availability, secure multi-tenancy, and a radically simplified management, patching, and support model. The result is an agile database environment that is better able to support business needs by enabling higher end-user productivity, increased utilization, and reduced IT costs.

- Enterprise Database Cloud with Oracle SuperCluster

- Oracle Optimized Solution for Oracle E-Business Suite

- Oracle Optimized Solution for PeopleSoft Human Capital Management

- Oracle Optimized Solution for SAP

- Oracle Optimized Solution for Oracle WebCenter Content on SPARC SuperCluster

- Oracle Optimized Solutions for Oracle SuperCluster Backup and Recovery

What are the benefits of using Oracle Solaris Cluster on Oracle SuperCluster?

Oracle SuperCluster is a highly optimized and reliable system. However, some applications require an additional level of availability that can be obtained only by tightly coupling multiple server units through an advanced OS-based clustering solution. Oracle Solaris Cluster is the clustering solution designed for Oracle Solaris and is optimized to leverage Oracle SuperCluster's redundancy and reliability features. It provides built-in support for a large portfolio of applications, with a wide range of options for virtualized deployment based on Oracle VM Server for SPARC and Oracle Solaris Zones, which are compatible with Oracle SuperCluster configurations. With Oracle SuperCluster customers get the perfect environment for deploying high availability clustering: a pre-integrated hardware cluster and a

pre-tested system, which means no errors in cabling, no issues in hardware compatibility; built-in redundancy for network, storage, server, and connectivity; and seamless integration and thorough testing with operating system and clustering software. Together Oracle SuperCluster and Oracle Solaris Cluster deliver the highest service level for mission-critical applications across all tiers of the data center.

How can Oracle SuperCluster T5-8 be managed effectively?

Oracle Enterprise Manger Ops Center 12c is included to manage all aspects of hardware and virtualization configuration. Oracle Enterprise Manager 12c provides a complete cloud lifecycle management solution including self-service provisioning and integrated chargeback and capacity planning.

Where can I find more information about Oracle Solaris, Oracle Solaris Cluster and Oracle Enterprise Manager Ops Center?

Visit the following web pages:

http://www.oracle.com/technetwork/server-storage/solaris/index.html

http://www.oracle.com/technetwork/server-storage/solaris-cluster/index.html

http://www.oracle.com/technetwork/oem/ops-center/index.html

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